

## INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue

Room N758

Indianapolis, Indiana 46204-2216

(317) 232-5533

FAX: (317) 232-0238

An Equal Opportunity Employer • <http://www.in.gov/dot>

MITCHELL E. DANIELS, JR., Governor  
MICHAEL W. REED, Commissioner

Writer's Direct Line  
317-232-5450

# Local Pavement Preventative Maintenance Project Criteria for The American Recovery and Reinvestment Act (Stimulus) Program Eligibility

As Approved by FHWA and INDOT  
March 3, 2009

The following criteria apply to projects submitted by Metropolitan Planning Organizations (MPOs) and Local Public Agencies (LPAs) only for the America Recovery and Reinvestment Act (ARRA) funding. FHWA and INDOT are providing an opportunity for funding Preventive Maintenance (PM) type projects as part of the American Recovery and Reinvestment Act. These are more than routine maintenance, such as pothole repairs, but less than Functional (2-lay Hot Mix Asphalt [HMA] resurface) or Structural Treatments (3 or more lifts of HMA). Typical pavement conditions and distresses addressed by PM are shown in the table below. The condition of local roads attempting to qualify for PM work with ARRA funds should fit within the road condition criteria listed below. Being determined eligible for possible funding from ARRA does not guarantee funding.

If dealing with a concrete pavement, the PM activities that may be eligible for funding under the ARRA are as noted below based upon the pavement's specific levels of deterioration:

- **For PCCP Treatments** - age must be > 8 years, and:
  1. PCCP Patching - eligible if existing deteriorated areas  $\leq$  10% pavement area defined in the overall project, or
  2. PCCP Joint Sealing/Resealing - eligible if existing deteriorated area  $\leq$  10% pavement area defined in the overall project, and the joint sealing  $\geq$  25% deteriorated by lineal foot, or
  3. PCCP Profiling/Retexturing (For Friction or Roughness) - eligible if existing friction is poor as demonstrated by high accident data (i.e., 3 friction-related

crashes in 3-years, etc.), or measured poor friction data, (i.e., INDOT friction performance requirements, etc.).

If dealing with a HMA pavement, the PM activities that may be eligible for funding under the ARRA are as noted below based upon the pavement's specific deterioration:

- **For HMA Treatments** – the Treatment Selection Chart below shows what PM or capital pavement treatments may be eligible within the ARRA funded program. The Treatment Criteria Chart below must be completed to substantiate that the proposed treatment is appropriate to the specific local roads.

**Treatment Selection Chart** (numbers correspond to those in Treatment Criteria List below)

<b>DISTRESSES***</b>	<b>LOW</b>	<b>MODERATE</b>	<b>SEVERE</b>
Oxidation (Aging)	2, 3, 4, 5	2, 3, 4, 5	2
Raveling	2	2	Structural Overlay 3R
Transverse & Longitudinal Cracking	1, 2	1, 2	Structural Overlay 3R
Rutting	3, 5	3, 5	5
Bleeding	2, 5	2, 5	5
Alligator Cracking (Fatigue)	1, 2, 3, 4, 5	Functional Overlay Partial 3R; Structural Overlay 3R	Structural Overlay 3R

\*\*\*See *DISTRESS IDENTIFICATION MANUAL for the Long-Term Pavement Performance Program*, FHWA-RD-03-031, June 2003, for more complete descriptions and photographs.

- The Treatment Criteria **List** and the **Treatment Criteria Chart** below delineate allowable pavement conditions for the various PM Surface Treatments to be eligible for ARRA funding:

#### **Treatment Criteria List**

1. Crack Sealing  
Age = any  
Rutting < ½ inch (unless done in conjunction with another surface treatment)
2. Chip Seal  
Age > 4 years  
Rutting < ¼ inch
3. Microsurface  
Age > 4 years  
Rutting = Any
4. \*Ultrathin Bonded Wearing Course (UBWC)  
Age > 4 years

Rutting < ½ inch

5. \*HMA Surface, single lift with profiling/scarification (INDOT Specification Section 402 shall apply)
  - < 20% (of HMA) wedge and level allowed
  - Age > 5 years
  - Rutting = Any

*\*Americans with Disabilities Act (ADA) requirements apply for these treatments when adding over ½ inch thickness or if milling is performed. ARRA projects are eligible for upgrading to ADA standards at 100% federal funding. UBWC may be placed at ½", ¾", or 1" total thickness, depending on aggregate gradation.*

**Treatment Criteria Chart (complete chart for the submitted project(s))**

DISTRESSES***	LOW	MODERATE	SEVERE
Oxidation (Aging)	Record area affected in square feet and convert to % of overall pavement on the project.		
Raveling	Record area affected in square feet and convert to % of overall pavement on the project.		
Transverse & Longitudinal Cracking	≤ ¼ inch crack width	> ¼ inch, ≤ ¾ inch crack width	> ¾ inch crack width
Rutting	≤ ¼ inch Rut depth	> ¼ inch, ≤ ¾ inch rut depth	> ¾ inch rut depth
Bleeding	Record area affected in square feet and convert to % of overall pavement on the project.		
Alligator Cracking (Fatigue)	No or few connecting cracks	Interconnecting cracks	Interconnecting cracks & spalling

**Additional Submittal information for PM eligibility for all projects:**

- Projects must be designed per the Indiana Design Manual (IDM) Chapter 52 - revision January 2009 (available from INDOT Pavement Design), and bid and contracted through INDOT. However, the requirement for field testing to justify the PM treatment is waived and replaced by the inspection report noted below.
- Age of the pavement since the last treatment per criteria herein.
- Must be on the Federal-Aid Highway System. FHWA recommends a focus on higher volume and higher functionally classified roads. Eligible roads must be classified as a Major Rural Collector or above. Functional classification must be provided.
- Inspection report that includes:
  1. Representative photographs showing the predominant pavement condition and that can be used to show the selected treatment is appropriate to the existing conditions. As many photos as possible should be at identifiable locations on the project.
  2. Notes explaining how the proposed HMA treatment meets the criteria in the Treatment Selection Chart herein based on comparison to distresses in *Distress Identification Manual for the Long-Term Pavement Performance Program*, FHWA-RD-03-031, located at the website:

(<http://www.tfhr.gov/pavement/ltp/reports/03031/03031.pdf>) or the PCCP criteria.

3. Certified by a professional engineer.
4. In addition to the above, the following data should be submitted for proposed projects, if available:
  - a. Traffic Data
  - b. Design Data for existing road
  - c. History of what is beneath the surface; the pavement composition
- Before final payment is made on HMA Treatments 4 or 5 above, an as-built report shall be submitted. The as-built report will include the pavement composition from subgrade to surface based on coring information taken at reasonable intervals unless the agency has this data available from previous records and has submitted it as part of 4.c. above. The report will provide the owner a record document for their pavement preventive maintenance program.


Note: Visual inspections may be done by FHWA or INDOT to affirm appropriateness of the qualifying treatments listed herein.

Unless The American Recovery and Reinvestment Act (Stimulus) specifies otherwise, the projects funded under the bill will be required to follow all normal Federal-aid funding requirements, i.e., Title 23 requirements will apply to projects being all or partially funded under the criteria above using ARRA funds. Functional and structural treatments (e.g., pavement resurfacing, restoration or rehabilitation [3R] projects) will be done per the standard requirements in the Indiana Design Manual (IDM) -- Chapter 52.

APPROVED – March 3, 2009

By:

 3/3/09  
R. David Unkefer  
Engineering Services Team Leader  
FHWA Indiana Division

 3-3-09  
DAVID B. HOLTZ, P.E., Director  
Integrated Transportation Planning Division  
Indiana Dept. of Transportation

No previous editions.